In the Claims:

1-38. (Cancelled)

39. (Previously Presented) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material selected from the group consisting of polylactic acid-polyethylene glycol block copolymer, poly(ethyleneoxide)-poly(butylenetetraphthalate), poly(lactic acid-*co*-lysine), a poly(L-lactic acid) copolymer and a poly(Є-caprolactone) copolymer, wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the stent is suitable for *in vivo* use.

40. (Previously Presented) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material selected from the group consisting of: poly(lactic acid), poly(L-lactic acid), poly(D,L-lactic acid), and a copolymer of poly(lactic acid), poly(L-lactic acid), and/or poly(D,L-lactic acid), wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the stent is suitable for *in vivo* use.

41. (Previously presented) The method of Claim 40, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.

42. (Previously presented) The method of Claim 40, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

43. (Previously presented) The method of Claim 40, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

44. (Previously presented) The method of Claim 40, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

45-47. (Cancelled).

48. (Previously presented) The method of Claim 40, wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant.

49. (Previously Presented) The method of Claim 40, wherein the polymeric material is a coating on one or more portions of the stent.

50. (Previously Presented) A method of producing a biocompatible stent for *in vivo* use, comprising:

providing a stent having a portion thereof formed from polymeric material selected from the group consisting of: poly(glycolic acid), poly(D-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), poly (D,L-lactic-co-glycolic acid), and a copolymer of poly(glycolic acid), poly(D-lactic-co-glycolic acid), poly(L-lactic-co-glycolic acid), or poly (D,L-lactic-co-glycolic acid), wherein the polymeric material contains one or more toxic materials;

immersing the polymeric material in a densified carbon dioxide composition such that the toxic materials are absorbed by the densified carbon dioxide composition, wherein pressure and/or temperature of the densified carbon dioxide composition is adjusted to selectively absorb toxic materials from the polymeric material;

removing the densified carbon dioxide composition containing the toxic materials from the polymeric material;

lowering the density of the removed densified carbon dioxide composition such that the toxic materials entrained therein become separated therefrom; and

removing the separated toxic materials, such that the stent is suitable for *in vivo* use.

51. (Previously Presented) The method of Claim 50, wherein the one or more toxic materials are selected from the group consisting of organic solvents (polar or non-polar), unpolymerized monomers, polymerization catalysts, oligomers, and polymerization initiators.

52. (Previously Presented) The method of Claim 50, wherein the densified carbon dioxide composition is a liquid composition, and wherein the immersing and removing steps are carried out in an enclosed chamber.

53. (Previously Presented) The method of Claim 50, wherein the step of lowering the density comprises reducing pressure and/or increasing temperature of the densified carbon dioxide composition.

54. (Previously Presented) The method of Claim 50, wherein carbon dioxide in the densified carbon dioxide composition is present in a supercritical state.

55. (Previously Presented) The method of Claim 50, wherein the carbon dioxide contains one or more of a co-solvent, a surfactant, and a co-surfactant.

56. (Previously Presented) The method of Claim 50, wherein the polymeric material is a coating on one or more portions of the stent.